



EASTERN RESEARCH GROUP, INC.

## MEMORANDUM

TO: Bill Maxwell, U.S. Environmental Protection Agency (EPA),  
Office of Air Quality Planning Standards (OAQPS) (MD-13)

FROM: Heather Wright, Eastern Research Group (ERG), Morrisville

DATE: March 31, 1998

SUBJECT: Final Summary of the February 26, 1998 Meeting of the Industrial Combustion  
Coordinated Rulemaking (ICCR) Process Heater Work Group

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### 1.0 INTRODUCTION

- The purpose of the meeting was to allow attendees to discuss various activities of the ICCR Process Heater Work Group (PHWG). The flash minutes for the meeting are included as attachment 1.
- The meeting was held on February 26 in Winston-Salem, NC.
- A complete list of meeting attendees with their affiliations is included as attachment 2.
- The Work Group developed an agenda of discussion topics for the meeting. Meeting participants agreed to discuss the Coordinating Committee (CC) meeting, testing needs, survey data gaps, and Subgroup action items. Presentations on solid waste combustion and other-fired units were also scheduled.

### 2.0 SUMMARY OF DISCUSSION AND DECISIONS

Work Group discussions are summarized in the following sections:

- 2.1 Coordinating Committee Meeting
- 2.2 Presentation on Solid Waste Combustion
- 2.3 Presentation on Other-Fired Process Heaters
- 2.4 Testing Needs

- 2.5 Survey Database Gaps
- 2.6 Low NOx Burner Requirements
- 2.7 Subgroup Action Items

## **2.1 Coordinating Committee Meeting**

John Ogle lead a discussion of the major issues addressed by the CC on February 24 and 25 prior to the Work Group meeting. Mr. Ogle provided the following updates:

- The CC did not have a final definition for POM (polycyclic organic matter) from EPA. PHWG members believe that the definition will have some relevance for process heaters. A Work Group member stated that the PHWG has CARB 429 data for gas-fired units and should consider the need for additional POM data when future testing needs are identified.
- The updated versions of the inventory and survey databases are scheduled to be posted to the TTN (transfer technology network) on March 2.
- The CC reached consensus, supporting testing suggested by the Combustion Turbine and Internal Combustion Engine work groups.
- The Economic Analysis Work Group made a presentation to the CC. They explained that they will need hazardous air pollutant (HAP) reduction information and cost data (in real dollars for 1998) from the source work groups.
- The CC reached consensus on direct-fired process heaters and will forward a recommendation to EPA which supports the PHWG's conclusions on direct-fired units.

Topics from the CC meeting that resulted in further Work Group discussion are summarized in the following sections:

### **2.1.1 Solid Waste Definition**

### **2.1.2 Milestone Tracking**

### 2.1.3 Pollution Prevention

### 2.1.4 Process Heater Work Group MACT Floor Presentation

### 2.1.5 MACT Floor Exercise

## 2.1.1 **Solid Waste Definition**

- The Solid Waste Definition Subgroup report has been posted to the TTN. EPA has not finalized a solid waste definition. The Subgroup concluded that a fuel is a solid waste if it is a discarded solid, semi-solid, liquid, or contained gas and is not: (1) burned for energy recovery (e.g. natural gas, coal, fuel oil, natural wood), (2) fired to recover its chemical components, or (3) a comparable fuel. A list of comparable fuels is still being considered.
- Work Group members asked for clarification on several issues related to a solid waste definition, including: (1) when a final definition will be made, (2) if it is appropriate for individuals to submit comments on the comparable fuels definition, (3) if propane is included with the fuels burned for energy recovery, (4) the definition of contained gas, and (5) how certain fuel types were categorized. Bill Maxwell explained that the Office of Solid Waste (OSW) is still in the process of developing an approach to solid waste and dealing with many of the issues that the Work Group raised. Mr. Maxwell will investigate when the OSW will finalize a position on comparable fuels and other issues raised by the Work Group.

## 2.1.2 **Milestone Tracking**

Bill Maxwell presented the milestone tracking summary for the PHWG (handout included as attachment 3) and reviewed the group's progress to date.

- The Work Group has not begun work on the preliminary regulatory recommendations or the regulatory analysis for gas- and fuel oil-like liquid-fired units which was scheduled to begin in February. The tracking chart also demonstrates that much work must still be conducted for other-fired process heaters.

- A Work Group member suggested that they use the tracking chart to guide action items and meet deadlines. It was also suggested at the CC meeting that EPA and the CC keep the work groups better informed on deadlines and time constraints within the ICCR.
- There was general agreement within the PHWG that work on indirect, gas- and fuel oil-like liquid-fired units is nearing completion and attention must now begin to focus on other-fired units.

### **2.1.3 Pollution Prevention**

- The Pollution Prevention (P2) Subgroup presented a list of good combustion techniques to the CC for the source work groups to consider. An industry representative voiced concern that information from the P2 Subgroup is not being distributed to the work groups in a timely manner and is becoming too prescriptive. Emphasis must be placed on the source work groups for making final decisions concerning the P2 techniques that will work best for specific combustion units.
- A representative of the P2 Subgroup said that the list is intended to be used as a checklist of various techniques and practices that the source work groups should consider. Not all recommendations suggested by the P2 Subgroup can be implemented by all the combustion types.
- The CC approved the continuation of the P2 Subgroup until the April CC meeting. By the April meeting, the Subgroup will finalize input and output issues and flesh out information on operator training. A P2 Subgroup representative explained that the training issues will also be presented as recommendations for consideration by the Work Groups.
- Energy efficiency has been suggested as an alternative approach to P2. A question was raised as to how broadly P2 can be interpreted within the ICCR. A Work Group member suggested that P2 may be limited to the operation of the combustion device and that the Work Group cannot realistically deal with input and output issues.
- Another question was raised as to whether good combustion practices (GCP) can be considered P2. An industry representative explained that some members of the P2 Subgroup view GCP in the same context as P2, while others do not consider the two to be the same.

### **2.1.4 Process Heater Work Group MACT Floor Presentation**

- Lee Gilmer presented to the CC the Work Group's determination that the MACT (maximum achievable control technology) floor for indirect, gas- and fuel oil-like liquid-fired units is not add-on controls.

- Several Work Group members agreed that by presenting only one part of their overall MACT floor analysis to the CC, they did not receive recognition for having performed a thorough and complete analysis. There was also general agreement within the Work Group that the CC is not receptive to receiving small portions of information.
  - ▶ A Work Group member said that the presentation demonstrated that they must thoroughly explain every step in their analyses and not assume that people will be able to follow jumps in logic.
  - ▶ It was also mentioned that numerical data should be limited, as it detracts from the conclusions being made in the presentation.
- A suggestion was made that when the Work Group finalizes the MACT floor determination, they present a full package outlining the entire process to the CC at that time. Many Work Group members concurred and suggested that the Work Group present a final determination to the CC in July or September and include in the final report a thorough explanation of all the steps taken to determine the floor.
  - ▶ An industry representative stated that the Work Group should present the information to the CC by the July meeting. At that time EPA will determine how much input the work groups will continue to provide to the ICCR process. Thus, if PHWG participation is limited following that meeting, they will at least have presented their floor recommendation for indirect, gas- and fuel oil-like liquid-fired units for EPA to consider.
  - ▶ Another member suggested that when the Work Group makes a final presentation on MACT floor, they address the questions that the CC raised concerning subcategorization of fuels, definition of control device, and other issues.
  - ▶ It was also suggested that for future presentations, the presenter practice the talk with a majority of the Work Group members to ensure that all the information is thoroughly covered.
  - ▶ Work Group member suggested that the TTN might be a better forum to present information to the CC. For example, once the PHWG finalizes a position, a report can be placed on the TTN for the CC to review, saving time and moving the process forward faster, as opposed to presenting the information in a formal manner. An EPA representative stated that all reports must be presented to the CC at the meetings, but that the Work Group could present information in large reports to maximize efficiency.
  - ▶ The Work Group decided that a final determination on MACT for indirect, gas- and fuel oil-like liquid-fired units will be presented to the CC in July.

### 2.1.5 MACT Floor Exercise

- As an exercise, the CC meeting attendees were presented with a case study for a fictitious subcategory of combustion devices at the previous day's meeting. The CC and audience members were asked to consider the data available for the combustion devices and answer questions regarding the determination of MACT floor for the devices. Available HAP emission data varied over a wide range. The variation could not be explained and was not systematic. In addition, all units were operating within normal ranges during testing and none of the units have add-on controls.
- An industry representative stated that many people, including representatives from EPA, indicated that no MACT floor is a viable option after participating in the MACT floor exercise. In addition, many exercise participants stated that GCP are also an option. Other participants suggested training and small unit applicability cutoff limits as well. Some exercise participants indicated that a tons/year analysis should be performed, as it might reveal that the units emit little HAP overall and thus, are not a high priority.
  - It was apparent to several Work Group members that many participants in the exercise did not follow the rules outlined and made some incorrect assumptions. Some participants in the exercise believed that all the units could be made to perform at the same level, even though they were told that the variability in unit performance was unexplainable.
  - The PHWG members believe that it was a useful exercise because it got people thinking about how to set a MACT floor and the difficulties of doing so with a range of HAP emissions that does not correlate to operations or control.
  - Some Work Group members expressed concern that although many individuals appear to be receptive to the option of no MACT floor now, later in the process opinions could change. Thus, if the final determination of the Work Group will be no MACT floor for indirect, gas- and fuel oil-like liquid-fired units, then the information should be presented to the CC as soon as possible.
  - An industry representative also mentioned that it was relatively easy for people to suggest GCP as a regulatory option in the exercise, because they did not have to consider monitoring. Participants may not have been as receptive to GCP if they had considered the difficulty of determining how to verify and monitor them.
  - A Work Group member pointed out that they will still have to consider regulatory alternatives beyond the floor, so a no floor determination does not necessarily mean no regulations for those units.
  - It was suggested by a Work Group member that there be no regulation at all for this subcategory of process heaters, but that the Work Group recommend numeric limits for other-fired/waste burning units. As such, gas- and fuel oil-like liquid-

fired units will be incorporated in the rule and would not subject to other MACT rules.

- A question was raised as to whether there would be a problem under Section 112(j) of the Clean Air Act (CAA) if EPA determines there is no standard for indirect, gas- and fuel oil-like liquid-fired units. An EPA representative explained that Section 112(j) is only a problem when EPA fails to take action in the time that was mandated. In this case, EPA would state that they have considered these units and determined that the standard is no control.
- The PHWG also discussed GCP as opposed to numeric limits. An EPA representative pointed out that even if GCP were determined to be the floor, because it is what the best performers are doing, there is still the requirement in Section 112(h) that a numeric limit must be set or proven infeasible.
- A Work Group member suggested that if a source cannot achieve a specific numeric limit, because it is already performing to its best capability, then the limit is infeasible. An EPA representative stated that achievability and infeasibility are not comparable.
- Another Work Group member stated that Section 112(d) says that EPA must prescribe regulations that will achieve a reduction of pollutants. If the available data does not show that any reduction will occur if a numeric standard is developed, then perhaps there is no need for a numeric limit at all.
- An industry representative suggested looking at the issue based on compliance. For example, PERF (Petroleum Environmental Research Forum) data shows that burning gas does not result in significant HAP emissions. Thus, if a unit is burning gas, it can be considered in compliance. Another industry representative stated that Section 112(h) is concerned with numeric limit feasibility and that a numeric limit must be determined before any decisions about compliance can be made.

## **2.2 Presentation on Solid Waste Combustion**

Rick Crume, EPA co-chair of the Incinerator Work Group (IWG) presented information on solid waste combustion and other issues related to Section 129 (see handout presented as attachment 4).

- Mr. Crume explained that the presentation was originally designed for the Boiler Work Group (BWG) to show how the IWG is addressing Section 129 issues and to demonstrate how the two work groups could coordinate efforts to develop a single solid waste

combustion rule. These issues also apply to process heaters, as well as boilers and incinerators, because Section 129 applies to any unit combusting solid waste material.

- Mr. Crume stated that large municipal waste incinerators and medical waste incinerators will not be included, as they do not fall under the categories of industrial and commercial waste incinerators (ICWI) or other solid waste incinerators (OSWI) which will be regulated under the rule. Mr. Crume also explained that, at this point in the process, regulatory development is occurring separately for ICWI and OSWI, although it is possible that they will be handled under one rule.
- A question was raised as to which category wood-fired units would be placed. Mr. Crume said it is likely that they will fall under OSWI, but it is uncertain for sure.
- At this point in the process, the IWG foresees a single rulemaking effort under Section 129 for boilers, incinerators, and process heaters. The IWG will take the lead on rule development with input and assistance from the other two work groups. There will be a single proposal and preamble, and subcategories will be developed, each having their own emission limits. The PHWG will have to determine to what units the rulemaking will apply and forward the appropriate information (e.g., possible subcategories, pollutants of concern, control alternatives) to the IWG.
- A question was raised as to whether subcategorization will be based on fuel type or unit type. Mr. Crume said that it is not yet known how subcategorization will occur.
- Mr. Crume also explained that EPA must draft a regulatory alternatives white paper by November 1998 (outside of the ICCR process). The IWG is drafting a regulatory alternatives paper (RAP) to be presented in draft form to the CC in July. The IWG's intent for the RAP is that the CC will forward the information to EPA to be considered in the development of their white paper.



- The RAP will include subcategory characterizations and regulatory alternatives. The IWG would also like to include other issues and needs, as well as information on steps to be taken to implement statutes and executive orders. These topics will not be addressed by EPA in the white paper, but the IWG believes it is necessary to provide EPA with as much information as possible. Detailed information, such as subcategory definition sheets, will be presented in the appendix of the RAP to facilitate the addition or deletion of information.
- Work Group members raised concern as to whether the RAP could be developed without a final ruling on a definition of solid waste from EPA. Mr. Crume said that the source work groups can make preliminary determinations as to what fuels will likely be considered under Section 129 and refine the list after EPA makes a final decision.
- An industry representative suggested that the PHWG use the RAP outline and the examples of subcategorization and regulatory alternatives presented by Mr. Crume to guide them in their approach to other-fired units.
- A question was raised as to whether there could be overlap between the rules developed for Section 129 and those for Section 112. An EPA representative explained that there cannot be any overlap. If a unit fires solid waste, then it will be subject to Section 129 and cannot be regulated under Section 112.
- Section 129 applies to combustion devices burning any solid waste material. It is unclear what amount of solid waste is considered to be “any”. A Work Group member asked how co-fired units, for example those burning 90% natural gas and 10% wood chips, would be handled. Would such a unit be considered under Section 129? Another Work Group member asked how liquid chemical waste streams would be handled, as mixtures are not always consistent.

- The BWG and the IWG have formed coordination teams. It was suggested that the PHWG do the same or form a liaison team to work with the other work groups on Section 129 issues. Many Work Group members agreed that it will be necessary for the groups to work together.
- Concern was raised about issues related to compliance if the three unit types will fall under one regulation. In addition, there was concern that there may be a problem with determining regulatory alternatives under a single rule, because the same controls cannot be applied to boilers, incinerators, and process heaters. An EPA representative explained that careful and thorough subcategorization will be necessary.

### **2.3 Presentation on Other-Fired Process Heaters**

Jason Huckaby of Eastern Research Group presented information from the survey and inventory databases on other-fired process heaters (see handouts presented as attachment 5).

- Mr. Huckaby provided the Work Group with a list of indirect-fired process heaters found in the ICCR survey database. The list was also distributed at the previous Work Group meeting in Los Angeles, but was not discussed at that time (see handouts presented as attachment 6). He explained that all units in the survey database should be firing fuels other than gas or fuel oil-like liquids, as the survey was to be completed for non-fossil fuel burning units only.
- An EPA representative asked Work Group members to review the data for their industries and look for any inconsistencies in the information that was reported, as respondents frequently misinterpreted the questions.
- Mr. Huckaby also presented information extracted from the inventory database. His analysis was based on version 3 of the database which incorporated all work group corrections. Information was extracted on indirect, other-fired units based on fuel types.
- An industry representative pointed out that other-fired fuels still include coal and other fossil fuels at this point in the process.
- Additional analyses included a list of facilities showing indirect, other-fired units in both the survey and inventory databases, a list of standard industrial classification (SIC) codes

reported for facilities with indirect, other-fired process heaters, and control device information.

- The SIC analysis revealed that numerous facilities reporting indirect, other-fired units are associated with asphalt production. A Work Group member stated that an asphalt MACT exists and that process heaters in that industry might already be covered. Another Work Group member indicated that the asphalt MACT only covers one type of asphalt plant and that the Work Group will have to be careful about defining areas of potential overlap with other MACTs.
- An EPA representative explained that the Work Group may still need to perform quality assurance checks of the information in the inventory database, especially for inconsistencies in SIC codes and gaps in information, prior to performing more analyses.
- The Work Group decided that they must finalize a definition for gas and fuel oil-like liquids at the April meeting. Following the determination of a final definition, units firing these fuels will be pulled out of the indirect, other-fired process heater list.
- A Work Group member suggested that they review the available data and decide whether they would like to subcategorize other-fired fuels into liquids and solids. A EPA representative pointed out that the surveys may not have been sent to many facilities firing other solid and liquid fuels. The survey mailing list was developed based on fuels or wastes indicated by source classification codes (SCCs). Most SCCs for process heaters do not include an indication of the fuel or waste burned. Thus, information on other-fired fuels may be limited.
- It was mentioned by several industry representatives that it will be difficult to determine how other liquid fuels (non fuel oil-like) will be handled (as wastes or as fuels), because the mixtures can be highly varied.
- The Work Group developed a preliminary list of fuels for the gas and fuel oil-like liquids category that included: LPG (liquid petroleum gas), propane, process gas, and natural gas. The other-fired fuels list tentatively includes: solid waste, coal, wood, waste oil, crude oil, other liquids, and landfill gas. The Work Group decided that some types of oils may be categorized as fuel oil-like, while others may have to be placed in the other fuel category. It was decided that Lee Gilmer and Jim Seebold will review the WSPA (Western States Petroleum Association) data to determine what types of oils can be categorized as fuel oil-like.
- It was agreed that the Other-Fired Process Heater Subgroup will decide by the April Work Group meeting, after they have begun to review the available information, if they will be ready to present a floor for other-fired units by the July or the September CC meeting. Several Work Group members cautioned the group not to rush to make a decision on the floor for such units.

- An industry representative asked if EPA could create a list of individual units from the inventory database, as opposed to the segment information that was provided by ERG. EPA will create a table of information based on individual units and forward it to the Work Group.

## 2.4 **Testing Needs**

- There is general concern within the Work Group that it is too late in the regulatory process to begin testing. Several participants agreed that testing is a lengthy process and that it could take as long as 6 months for the data to get to the Work Group once testing is performed. It was also mentioned that the Work Group might bypass testing all together, as Section 112 says that available data will be used to develop the standard. An industry representative asked whether test data are required to set a numeric emission limit under Section 112 and said that the Work Group should confirm that it is before they proceed.
- An EPA representative stated that the Work Group must identify HAPs of concern prior to making any testing recommendations. If the Work Group cannot identify any pollutants of concern, then perhaps no testing is needed. It was also mentioned by a Work Group member that the BWG is attempting to identify HAPs of concern on a risk basis.
- A Work Group member suggested that it may be too late to test for Section 112 determinations, but not for Section 129. An industry representative pointed out that the Work Group does not definitely know what Section 129 fuels are yet, but does know that numeric emission limits for units firing those fuels will likely be developed and data will then be needed. In addition, Section 129 requires that emission standards be set for nine specific pollutants, so the Work Group will definitely need data for those.
- Another Work Group member stated that a control technology based standard is likely for the Section 129 fuels, especially if there are limited test data.
- An EPA representative stated that the Work Group should seriously considered testing needs for other fuels (not gas or fuel oil-like), as they have just started to examine those units and do not know whether or not a numeric emissions limit will be developed. If the Work Group determines that a numeric limit is necessary for other-fired units, then they will need emission data for their analysis. In addition, the Work Group can proceed while testing is in progress, because it may be possible to identify the floor (e.g., a specific control technology) without emission data. Later in the process, the Work Group would have emission data with which to conduct a beyond the floor analysis.
- The Testing and Monitoring Protocol Work Group (TMPWG) has provided the source work groups with some guidance on testing. It was suggested that if the PHWG is interested in testing and obviously have little time in which to do it, they should use the TMPWG suggestions, especially for other fuels. Several Work Group members believe

that they have sufficient data for gas and fuel oil-like liquids and the question of testing needs is only for other-fired units.

- There is agreement in the Work Group that focus must now turn to fuels other than gas. An industry representative suggested that the BWG may have some test data for such fuels and may be able to share the information with the PHWG. Several Work Group members believe that some data exist for other-fired process heaters in private industry. An EPA representative added that neither the BWG or the IWG have requested any testing to date.
- A question was raised as to whether test data for boilers could be representative of process heaters.
- An industry representative suggested that the Work Group review existing test information for other-fired units. If such data exist, the Work Group would have to determine if they will be sufficient for their analyses, or whether more testing is needed. It was decided that EPA will review the emission test database for HAP and criteria test data for fuels other than gas and fuel oil-like liquids and forward the information to the Other-Fired Process Heater Subgroup.
- It was mentioned that Jane Williams has stated that she will draft a position paper on testing needs for the Work Group, but the information has not been presented to date. An industry representative stated that the testing plan will likely include mercury and dioxin, as the environmental caucus is very interested in those pollutants. Bill Maxwell will contact Ms. Williams to discuss the position paper.

## **2.5 Survey Database Gaps**

- EPA has identified information gaps in the survey database (see handout presented as attachment 7). The gaps are a result of survey respondents failing to complete all sections of the survey. Information has been divided up by combustion unit type (e.g., boilers, process heaters, incinerators) and distributed to the source work groups so that they can fill in the missing information. Missing information includes: whether a unit is directly or indirectly fired; unit capacity; operating parameters; fuel information; and SIC information.
- EPA asked that Work Group members review the data gaps and provide additional information by the end of March (to be incorporated into version 3 of the survey database). The information is divided into tables based on the type of information missing and is posted on the TTN. All attempts should be made to provide the information electronically to EPA, but paper submittals can be sent to Bill Maxwell. When completing missing information, Work Group members must give their name and the basis for the information provided.

## **2.6 Low NOx Burner Requirements**

- At the January 20 and 21, 1998 PHWG meeting, it was decided that Jane Williams and Janet Peargin would collect information from CARB (California Air Resources Board) concerning possible permit conditions requiring low NO<sub>x</sub> burners for controlling HAP emissions. Ms. Peargin explained that they have determined that the information does not pertain to process heaters. She also said that there had been some discussion within the P2 Subgroup about acquiring information from CARB concerning reformulated diesel fuel, but they have since found out that it does not pertain to stationary sources, such as process heaters.

## **2.7 Subgroup Action Items**

- Several individuals indicated that they believe the Work Group is most productive when work is performed within the Subgroups. In addition, the Subgroup meetings are most efficient when members have a schedule of deliverables that they must meet.
- Meeting participants identified several tasks for three of the Subgroups to perform between now and the April Work Group meeting. The Subgroup leads will determine (in conjunction with their members) meeting dates and locations, as well as develop timelines and lists of deliverables to the Work Group.
- The following action items were identified for the Other-Fired Process Heater Subgroup:
  1. Review data extracted from the survey and inventory databases for other-fired units,
  2. Begin to develop an approach for other-fired units,
  3. Identify those units that are or will be covered under other MACT standards, and
  4. Begin to identify testing needs for other-fired units and review available emissions data for fuels other than gas and fuel oil-like liquids.
- The following action items were identified for the MACT Documentation Subgroup (the name of the MACT Floor Documentation Subgroup was changed to MACT Documentation Subgroup and it was decided that Janet Peargin will be added to the group and Norbert Dee will work with the Subgroup when possible.):
  1. Begin to build a case for the determination that it is not possible to identify a MACT floor for indirect, gas- and fuel oil-like liquid-fired units,
  2. Begin to scope out beyond the floor options for indirect, gas- and fuel oil-like liquid-fired units, determine controls in place for HAPs, and consider what controls would be technically feasible, and

3. Consider information presented by the P2 Subgroup at the CC meeting and begin to evaluate GCP in the context of standard industrial practices.
- The following action items were identified for the Applicability Threshold Subgroup:
    1. Investigate the differences between exempting from the applicability of a standard as opposed to exempting from the applicability of a control requirement,
    2. Collect information on how to determine an applicability threshold and the possible basis for establishing one, and
    3. Begin to scope out the need for a co-fired fuel *de minimis* to be applied to the definition of solid waste incinerator.

### 3.0 UPCOMING MEETINGS

- A meeting is scheduled for April 30 in Fort Collins, CO.

**These minutes represent an accurate description of matters discussed and conclusions reached and include a copy of all reports received, issued, or approved at the February 26, 1998 meeting of the Process Heater Work Group. Bill Maxwell, EPA Co-Chair.**

**Attachment 1**

**Flash Minutes From The February 26, 1998 Meeting Of  
The ICCR Process Heater Work Group**



## **ICCR PROCESS HEATER WORK GROUP MEETING**

February 26, 1998  
Winston-Salem, NC

### **DECISIONS**

The Work Group changed the name of the MACT Floor Documentation Subgroup to MACT Documentation Subgroup. It was decided that Janet Peargin will be added as a Subgroup participant and Norbert Dee will also work with the Subgroup when possible.

The Work Group decided that a final determination on MACT for indirect, gas- and fuel oil-like liquid-fired units will be presented to the Coordinating Committee in July.

### **ACTION ITEMS**

Bill Maxwell will investigate when the Office of Solid Waste will finalize their position on comparable fuels for the waste definition and other related issues and report back to the Work Group.

Bill Maxwell will contact Jane Williams to discuss the position paper that she has drafted on testing needs.

The Work Group will finalize a definition for gas and fuel oil-like liquid fuels at the April meeting. Work Group members will begin working on this issue individually prior to the meeting. Following the determination of a final definition, units firing these fuels will be pulled out of the indirect, other-fired process heater list.

Lee Gilmer and Jim Seebold will review the WSPA data to determine what types of oils can be categorized as fuel oil-like.

EPA will create a list of individual units from the inventory database and forward the information to the Work Group.

EPA will review the emission test database for HAP and criteria test data for fuels other than gas and fuel oil-like liquids and forward the information to the Other-Fired Process Heater Subgroup.

Work Group members will review the gaps identified in the survey database by EPA and provide additional information by the end of March to be incorporated into version 3 of the database. All attempts should be made to provide the information electronically, but paper submittals will be accepted through Bill Maxwell.

The following action items were identified for the Subgroups between now and the April Work Group meeting (a list of all Subgroups and their members is provided as an attachment):

#### **Other-Fired Process Heater Subgroup**

- ▶ review data extracted from the survey and inventory databases for other-fired units
- ▶ begin to develop an approach for other-fired units
- ▶ identify those units that are or will be covered under other MACT standards
- ▶ begin to identify testing needs for other-fired units and review available emissions data for fuels other than gas and fuel oil-like liquids

#### **MACT Documentation Subgroup**

- ▶ begin to build a case for the determination that it is not possible to identify a MACT floor for indirect, gas and fuel oil-like liquid-fired units
- ▶ begin to scope out beyond the floor options for indirect, gas and fuel oil-like liquid-fired units, determine controls in place for HAPs, and consider what controls would be technically feasible
- ▶ consider information presented by the Pollution Prevention Subgroup at the Coordinating Committee meeting and begin to evaluate good combustion practices in the context of standard industrial practices

#### **Applicability Threshold Subgroup**

- ▶ investigate the differences between exempting from the applicability of a standard as opposed to exempting from the applicability of a control requirement
- ▶ collect information on how to determine an applicability threshold and the possible basis for establishing one
- ▶ begin to scope out the need for a percent co-fired fuel *de minimis* determination to be applied to the definition of solid waste incinerator

#### **Good Combustion Practices Subgroup**

- ▶ no action items identified at this time

#### **Numeric Emission Limits Subgroup**

- ▶ no action items identified at this time

Subgroup leads will determine (in conjunction with their members) meeting dates and locations between now and the April Work Group meeting, as well as develop timelines and lists of deliverables to the Work Group.

## **UPCOMING MEETINGS**

A meeting is scheduled for April 30 in Fort Collins, CO.

## **FLASH MINUTES - ATTACHMENT**

### **MACT Documentation Subgroup:**

Subgroup lead - Lee Gilmer  
Roy Carwile  
Janet Peargin  
Jane Williams  
Bill Maxwell  
John Ogle  
Jim Seebold  
Norbert Dee (when possible)

### **Good Combustion Practices Subgroup:**

Subgroup lead - Chuck Feerick  
Jane Williams  
John Ogle  
Lawrence Otwell  
Greg Johnson  
Janet Peargin  
Jim Seebold  
Dave Smith

### **Other-Fired Process Heater Subgroup:**

Subgroup lead - Lawrence Otwell  
Roy Carwile  
Oliver Stanley  
Bruno Ferraro  
Karluss Thomas  
Bill Maxwell  
John Ogle

### **Direct-Fired Process Heater Subgroup:**

Subgroup lead - Bruno Ferraro  
Lawrence Otwell  
Dave Smith  
Jane Williams  
Oliver Stanley

### **Applicability Threshold Subgroup:**

Subgroup lead - John Ogle  
Dave Smith  
Bruno Ferraro  
Chuck Feerick  
Oliver Stanley  
Bill Maxwell

### **Numeric Emission Limits Subgroup:**

Subgroup lead - Chuck Feerick  
David Schanbacher  
Bill Maxwell  
Jane Williams  
Jim Seebold

**Attachment 2**

**Meeting Participants**

## MEETING ATTENDEES

Roy Carwile, Aluminum Company of America  
Rick Copeland, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards  
Rick Crume, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards  
Norbert Dee, National Petroleum Refiners Association  
Bruno Ferraro, Grove Scientific Company  
Klane Forsgren, Sinclair Oil Corporation  
Lee Gilmer, Texaco, Inc.  
Michelle Huang, Apt Associates  
Jason Huckaby, Eastern Research Group, Inc.  
Tim Hunt, American Petroleum Institute  
Mary Lalley, Eastern Research Group, Inc.  
Bill Maxwell, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards  
Diane McConkey, U.S. Environmental Protection Agency, Office of General Counsel  
John Ogle, Consultant, Dow Chemical Company  
Lawrence Otwell, Georgia-Pacific Corporation  
Janet Peargin, Chevron Corporation  
David Schanbacher, Texas Natural Resource Conservation Commission, Office of Air Quality  
Jim Seebold, Chevron Research & Technology Company  
Oliver Stanley, Cargill, Inc.  
Karluss Thomas, Chemical Manufacturers Association  
Heather Wright, Eastern Research Group, Inc.

**Attachment 3**  
**Milestone Tracking Summary - Process Heaters**

## **Attachment 4**

### **Presentation To The Boiler Work Group On Boiler And Incinerator Work Group Coordination**

## **Attachment 5**

### **Presentation On Available Data From The Survey and Inventory Databases For Other-Fired Indirect Process Heaters**



## **Attachment 6**

### **Process Heaters In The ICCR Survey Database Firing Fuels Other Than Gas and Fuel Oil-Like Liquids**

## **Attachment 7**

### **Data Gaps In The ICCR Survey Database For Process Heaters**